

# **The Limoniinae (Diptera: Tipulidae) of Australia**

**Part VI, VII and VIII**

**G. Theischinger**



**Stapfia 44, 1996**



# **The Limoniinae (Diptera: Tipulidae) of Australia**

**VI. New and insufficiently known species of *Toxorhina*  
LOEW, *Limonia* MEIGEN, *Atarba* OSTEN SACKEN,  
*Amphineurus* SKUSE, *Gonomyia* MEIGEN and *Molophilus*  
CURTIS**

**VII. The genera *Austrolimnophila* ALEXANDER,  
*Epiphragma* OSTEN SACKEN, *Leolimnophila* gen. nov.,  
*Tipulimnoea* gen. nov. and *Paralimnophila* ALEXANDER  
(all tribe Limnophilini)**

**VIII. Preliminary key to the genus-group taxa**

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**The Limoniinae (Diptera: Tipulidae) of Australia**  
**VI. New and insufficiently known species of *Toxorhina***  
**LOEW, *Limonia* MEIGEN, *Atarba* OSTEN SACKEN,**  
***Amphineurus* SKUSE, *Gonomyia* MEIGEN and *Molophilus***  
**CURTIS**

G. THEISCHINGER

**A b s t r a c t:** Thirteen species of the genera *Limonia* MEIGEN, *Atarba* OSTEN SACKEN, *Amphineurus* SKUSE, *Gonomyia* MEIGEN and *Molophilus* CURTIS are described as new. New information is provided on several little-known species of some of these genera and of *Toxorhina* LOEW.

**Introduction and methods**

The Australian species of *Molophilus* CURTIS were revised by THEISCHINGER (1988a, 1988b, 1992b). These revisions were updated since (THEISCHINGER 1994a). The Australian species of *Toxorhina* LOEW, *Limonia* MEIGEN (part), *Atarba* OSTEN SACKEN, *Amphineurus* SKUSE and *Gonomyia* MEIGEN were reviewed more recently (THEISCHINGER 1994b). Another attempt is made here to update the above work.

Largely the methods used in the revisions and outlined by THEISCHINGER (1992a) are also followed in this paper.

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### **Genus *Toxorhina* LOEW**

Synonymy as in THEISCHINGER (1994b).

### **Subgenus *Eutoxorhina* ALEXANDER**

Synonymy as in THEISCHINGER (1994b).

According to ALEXANDER (1934) and THEISCHINGER (1994b), *Eutoxorhina* has Rs and M unbranched and dm open. However, it appears now that the only reliable character of *Eutoxorhina* is the unbranched Rs.

### ***Toxorhina (Eutoxorhina) spec.***

It is not clear if the unique female which has Rs unbranched and M double-branched is a regular specimen of an undescribed species, a regular female of *T. (E.) ammoula* THEI. or an irregular individual.

Material examined: 1♀, Queensland, Mount Edith, 1050 m, 1.12.1994-3.1.1995, P. Zborowski, FI malaise (ANIC).

### **Genus *Limonia* MEIGEN**

Synonymy as in THEISCHINGER (1994b).

### **Subgenus *Dapanoptera* WESTWOOD**

Synonymy as in THEISCHINGER (1994b).

### ***Limonia (Dapanoptera) cermaki spec. nov. (Fig. 1)***

Description (♂): Head largely greyish black; rostrum, palps, scape and pedicel greyish- to blackish brown; flagellum of antennae greyish yellow and greyish brown. Thoracic terga greyish yellow to blackish brown, scutellum and mediotergite palest; pleura greyish yellow except for episternum which is brownish black. Pro- and metacoxa greyish yellow, mesocoxa blackish brown; trochanters, tibiae and basal three tarsal segments dark yellow; femora dark yellow with apex conspicuously blackened; terminal two tarsal segments greyish brown; claws black. Wings strongly suffused with golden and with large and small black patches and with a shining white spot near apex; two large dark patches at about midlength of wing aligned and broadly connected. Halteres with stem yellow and knob greyish brown and whitish yellow. Abdomen largely dark yellow, base of tergum 1, terga 4 and 5, sternum 4 and hypopygium largely black. Wing length 12.5 mm.

**Genitalia:** Hypopygium, Fig. 1.

**Female** unknown.

**Remarks:** Very similar to *L. (D.) richmondiana* SKUSE.

**Diagnostic characters (male):** wings without narrow silvery patches in cells CuP and A1; large dark distal wing patch distally concave; wing apex distinctly dark; parameres with apex long and slender.

**Material examined:** Holotype ♂: Queensland, Mount Spec, 6.12.1994-10.1.1995, M. Cermak, FI Trap (ANIC).

**Distribution:** Queensland (NEQ).

**Name:** Dedication to Mr M. Cermak of Townsville who collected the species.

### **Subgenus *Dicranomyia***

Synonymy as in THEISCHINGER (1994b).

### ***Limonia (Dicranomyia) bickeli* spec. nov. (Fig. 2)**

**Description (♂):** Head largely greyish black; rostrum, palps, scape, pedicel and base of flagellum greyish brown; most of flagellum missing. Thoracic terga greyish brown, scutellum and mediotergite markedly paler than scutum; pleura greyish- to brownish yellow. Coxae and trochanters pale greyish yellow, other leg segments missing. Wings suffused with greyish yellow to pale greyish brown; Sc ending opposite about midlength of Rs; Sc1 and Sc2 subequal in length, short; Rs about 1.5 times as long as basal section of R4+5; bscu very close to fork of M. Halteres largely greyish brown, stem paler than knob. Abdomen with terga largely greyish brown and sterna largely greyish yellow. Wing length 5.6 mm.

**Genitalia:** Hypopygium, Fig. 2.

**Female** unknown.

**Remarks:** Similar to *L. bunyip* THEI.

**Diagnostic characters (male):** tergite 9 relatively short and bilobed; parameres with apex long and thin; rostral prolongation of ventral gonostylus short and rather obtuse.

**Material examined:** Holotype ♂: New South Wales, Barrington Tops National Park, Williams River, 480 m, rock seepage, subtropical rainforest, 20.12.1993, D.J. Bickel (ANIC).

**Distribution:** New South Wales (SEN).

**Name:** Dedication to Dr D. J. Bickel of Sydney who collected the species.

***Limonia (Dicranomyia) panthera* THEISCHINGER (Fig. 3)**

*Limonia (Dicranomyia) panthera* THEISCHINGER, Stapfia 36: 121 (1994).

**Description of male:** Colouration and structure much as described for female (THEISCHINGER 1994b). Wing length 4.5 mm.

**Genitalia:** Hypopygium, Fig. 3.

**Remarks:** The female of *L. (D.) panthera* was not found similar to any other described Australian species (THEISCHINGER 1994b). The male hypopygium resembles *L. opima* (ALEX.) and *L. perpulchra* ALEX.

**Diagnostic characters:** Small size (wing length, male 4.5 mm, female 4.5 mm); strongly mottled wings.

**Material examined:** 1♂, 1♀, Queensland, Windsor Tableland, Forestry Hut, 1060 m, 16-17.4.1994, D.J. Bickel, pans (ANIC).

**Genus *Atarba* OSTEN SACKEN**

Synonymy as in THEISCHINGER (1994b).

**Subgenus *Ischnothrix* BIGOT**

Synonymy as in THEISCHINGER (1994b).

***Atarba (Ischnothrix) bickeli* spec. nov. (Figs 4, 5)**

**Description (♂):** Head missing. Thoracic terga and pleura dark reddish- to greyish brown. Coxae greyish brown, trochanters largely greyish yellow; other leg segments missing. Wings whitish subhyaline with blackish brown patches at vein forks and intersections, along crossveins including R3 and cord, and at longitudinal vein endings; in addition a larger and slightly paler patch each, just distal to arculus, at about midlength of wing between M and posterior wing margin and at about 1/3 respectively 2/3 length of cells A1 and A2. Halteres missing. Abdomen largely greyish yellow and greyish brown; terminalia yellowish brown. Wing length 5.9 mm.

**Genitalia:** Hypopygium, Figs 4, 5.

**Female** unknown.

**Remarks:** A member of the *A. iyouta* group (THEISCHINGER 1994b) of species; similar to *A. iyouta* THEI.



**Diagnostic characters (male):** aedeagal complex with one particularly prominent spine on each side.

**Material examined:** Holotype ♂: Queensland, Windsor Tableland, Forestry Hut, 1060 m, 16-17.4.1994, D.J. Bickel, pans (ANIC).

**Distribution:** Queensland (NEQ).

**Name:** Dedication to Dr D.J. Bickel of Sydney who collected the species.

### **Genus *Amphineurus* SKUSE**

Synonymy as in THEISCHINGER (1994b).

### **Subgenus *Amphineurus* SKUSE**

Synonymy as in THEISCHINGER (1994b).

### ***Amphineurus (Amphineurus) bickeli* spec. nov. (Fig. 6)**

**Description (♂):** Head largely dark greyish brown, including rostrum and basal three palpal segments; antennae somewhat paler, particularly scape and pedicel; terminal palpal segment whitish yellow. Thoracic terga largely dark greyish brown, distinctly marked with whitish yellow along lateral margins of scutum; scutellum yellow; pleura with most of dorsal portion and ventral portion blackish brown, in between whitish yellow. Coxae greyish brown and dull yellow, trochanters dull yellow; other leg segments missing. Wings suffused with greyish brown. Halteres with stem largely greyish brown, knob yellowish white. Abdomen largely greyish yellow to pale greyish brown, lateral edges blackish brown. Wing length 4.8 mm.

**Genitalia:** Hypopygium, Fig. 6.

**Female** unknown.

**Remarks:** A member of the *A. minusculus* group (THEISCHINGER 1994b) of species; most similar to *A. superbus* sp. n. and *A. zborowskii* sp. n.

**Diagnostic characters (male):** tergum 9 with four long posterior lobes, the outer ones much wider than the inner ones, median notch u-shaped, deep and narrow; gonostylus 2 slim and largely parallel sided.

**Material examined:** Holotype ♂: Queensland, Windsor Tableland, montane forest, 1260 m, 17-18.4.1994, D.J. Bickel, pans (ANIC).

**Distribution:** Queensland (NEQ).

**Name:** Dedication to Dr D.J. Bickel of Sydney who collected the species.

***Amphineurus (Amphineurus) superbis* spec. nov. (Fig. 7)**

**Description:** Head largely greyish black; rostrum and basal three palpal segments greyish brown, terminal palpal segment whitish yellow; antennae with scape, pedicel and basal flagellomere pale brownish yellow, remainder of flagellum largely greyish brown. Thoracic terga largely dark greyish brown, distinctly marked with whitish yellow along lateral and posterior margins of scutum; scutellum yellow; pleura with most of dorsal portion and ventral portion blackish brown, in between whitish yellow. Coxae greyish brown and dull yellow, trochanters dull yellow; other leg segments missing. Wings suffused with greyish brown. Halteres with stem largely greyish brown, knob dull whitish yellow. Abdomen of male largely greyish yellow to pale greyish brown, of female largely greyish brown and greyish yellow; lateral edges blackish brown. Wing length, male 4.2 mm, female 4.8 mm.

**Genitalia:** Male hypopygium, Fig. 7.

**Remarks:** A member of the *A. minusculus* group (THEISCHINGER 1994b) of species; most similar to *A. bickeli* sp. n. and *A. zborowskii* sp. n.

**Diagnostic characters (male):** tergum 9 with two shorter wide inner posterior lobes and two longer narrow pointed outer posterior lobes, median notch u-shaped, moderately deep and wide; gonostylus 2 slim and largely conical, with conspicuous brush of hair.

**Material examined:** Holotype ♂: Queensland, 17°27'S/145°29'E, Hugh Nelson Range, 1150 m, 3.1.-5.2.1995, P. Zborowski, FI/malaise (ANIC). Paratypes: Queensland: 1 ♀, same data as holotype (ANIC); 1 ♀, type locality, 4.2.-6.3.1995, P. Zborowski, malaise (ANIC).

**Distribution:** Queensland (NEQ).

**Name:** Superbus 3 = Latin for "splendid".

***Amphineurus (Amphineurus) zborowskii* spec. nov. (Fig. 8)**

**Description:** Head largely greyish black; rostrum and basal three palpal segments greyish brown, terminal palpal segment dull yellow; antennae with scape, pedicel and basal flagellomere greyish yellow to pale greyish brown, remainder of flagellum largely greyish brown. Thoracic terga largely dark greyish brown, distinctly marked with whitish yellow along lateral and posterior margins of scutum; scutellum dull whitish yellow; pleura with most of dorsal portion and ventral portion blackish brown, in between whitish yellow. Coxae greyish brown and dull yellow, trochanters dull yellow; other leg segments missing. Wings suffused with greyish brown. Halteres with stem largely greyish brown, knob dull whitish yellow. Abdomen of male largely greyish yellow to pale greyish brown, of female largely greyish brown; lateral edges blackish brown. Wing length, male 3.9-4.1 mm, female 4.1-4.3 mm.

**Genitalia:** Male hypopygium, Fig. 8.

**Remarks:** A member of the *A. minusculus* group (THEISCHINGER 1994b) of species; most similar to *A. bickeli* sp. n. and *A. superbus* sp. n.

**Diagnostic characters (male):** tergum 9 with two shorter wide inner posterior lobes and two longer narrow pointed outer posterior lobes, median notch v-shaped, wide and relatively shallow; gonostylus 2 relatively wide, winged and toothed.

**Material examined:** Holotype ♂: Queensland, 17°06'S/145°36'E, Mount Haig, 1150 m, 1.12.1994-3.1.1995, P. Zborowski, FI/malaise (ANIC). Paratypes: Queensland: 1♀, Mount Haig, 6.4-4.5.1995, P. Zborowski (ANIC); 1♀, 17°06'S/145°37'E, Mount Edith, 1050 m, 3.1.-5.2.1995, P. Zborowski, malaise (ANIC); 1♂, 2♀♀, same locality, 4.2.-17.3.1995, P. Zborowski, malaise (ANIC).

**Distribution:** Queensland (NEQ).

**Name:** Dedication to Mr P. Zborowski of Atherton who collected the species.

### ***Amphineurus (Amphineurus) leaski* spec. nov. (Figs 9, 11a)**

**Description (♂):** Head largely greyish black; rostrum and basal three palpal segments dark greyish brown, terminal palpal segment yellow; antennae largely yellowish- to pale brownish grey, basal flagellomere somewhat paler. Thoracic terga largely dark greyish brown, distinctly marked with dull yellow along lateral and posterior margins of scutum; scutellum yellowish brown to greyish brown; pleura with most of dorsal portion and ventral portion blackish brown, in between dull yellow. Coxae greyish brown and dull yellow, trochanters dull yellow; other leg segments missing. Wings suffused with greyish brown. Halteres with stem largely greyish brown, knob largely dull whitish yellow. Abdomen largely greyish yellow to greyish brown, lateral edges blackish brown. Wing length 4.5-4.7 mm.

**Genitalia:** Hypopygium, Figs 9, 11a.

**Female** unknown.

**Remarks:** A member of the *A. minusculus* group (THEISCHINGER 1994b) of species; similar to *A. minusculus* ALEX., *A. collessi* THEI., *A. monteithi* THEI. and *A. pullybuntor* THEI., most similar to *A. spectabilis* sp. n.

**Diagnostic characters (male):** tergum 9 with two narrow pointed inner posterior lobes and two wider outer posterior lobes, median notch u-shaped, deep; parameres ventrally widely rounded.

**Material examined:** Holotype ♂: Queensland, 17°27'S/145°29'E, GS3, Hugh Nelson River, 1150 m, 6.3.-4.4.1995, P. Zborowski, FI trap, JCU (West) (ANIC). Paratype: 1♂, Queensland, 17°06'S/145°37'E, Mount Edith, 1050m, 1.12.1994-3.1.1995, P. Zborowski, FI/malaise (ANIC).

**Distribution:** Queensland (NEQ).

**Name:** Dedication to Mr S. Leask of Sydney who, at the Australian Museum, sorted part of the material treated in this paper.

***Amphineurus (Amphineurus) spectabilis* spec. nov. (Figs 10, 11b)**

**Description:** Head largely greyish black; rostrum, basal three palpal segments, scape and pedicel greyish brown, flagellum of antennae greyish yellow; terminal palpal segment whitish yellow. Thoracic terga largely dark greyish brown, distinctly marked with dull whitish yellow along lateral margins of scutum; scutellum greyish yellow to yellowish brown; pleura with most of dorsal portion and ventral portion blackish brown, in between greyish yellow. Coxae greyish brown and dull yellow, trochanters dull yellow; other leg segments missing. Wings suffused with greyish brown. Halteres with stem largely greyish brown, knob greyish brown and yellowish white. Abdomen of male largely greyish yellow to pale greyish brown, of female largely greyish brown; lateral edges blackish brown. Wing length, male 4.3-4.8 mm, female 4.0-5.2 mm.

**Genitalia:** Male hypopygium, Figs 10, 11b.

**Remarks:** A member of the *A. minusculus* group (THEISCHINGER 1994b) of species; similar to *A. minusculus* ALEX., *A. collessi* THEI., *A. monteithi* THEI. and *A. pullybuntor* THEI., most similar to *A. leaski* sp. n.

**Diagnostic characters (male):** tergum 9 with two narrow pointed inner posterior lobes and two wide outer posterior lobes, median notch u-shaped, moderately deep; parameres with conspicuous ventral spine.

**Material examined:** Holotype ♂: Queensland, 19°00'S/146°10'E, Mout Spec, 875-880 m, 6.12.1994-10.1.1995, M. Cermak, FI/malaise (ANIC). Paratypes: Queensland: 2♂♂, 8♀♀, same data as holotype (ANIC); 2♂♂, 5♀♀, Mt Spec, 6.12.1994-10.1.1995, M. Cermak, FI trap (ANIC); 2♀♀, 18°55'S/146°10'E, Mount Spec, 880 m, 6.2.-9.3.1995, M. Cermak, malaise (ANIC).

**Distribution:** Queensland (NEQ).

**Name:** Spectabilis, -e = Latin for "admirable".

**Genus *Gonomyia* MEIGEN**

Synonymy as in THEISCHINGER (1994b).

**Subgenus *Leiponeura* SKUSE**

*Leiponeura* SKUSE, Proc. Linn. Soc. N.S.W. 4: 795 (1890) (as genus).

*Lipophleps* BERGROTH, Psyche 22: 55 (1915) (as genus) (unnecessary new name for *Leiponeura* SKUSE 1890, not a junior homonym of *Liponeura* LOEW 1844).

**Type species:** *Leiponeura gracilis* SKUSE 1890 (= *Gonomyia skusei* ALEXANDER 1919), by designation of ALEXANDER 1913a: 503.

Following the regional treatments of OOSTERBROEK and JONAS (1986) and OOSTERBROEK (1989), the (unnecessary) replacement name *Lipophleps* BERGROTH was also used by THEISCHINGER (1994b). In this paper, however, returning to the usage of the correct name under the I.C.Z.N. Code, I follow SAVSHENKO, OOSTERBROEK & STARY (1992).

***Gonomyia (Leiponeura) walkeri* spec. nov. (Fig. 12)**

**Description:** Head largely greyish brown and whitish yellow; rostrum pale, palps and antennae darker greyish brown. Thoracic terga largely greyish brown, whitish yellow along part of lateral and posterior margins of scutum; scutellum and mediotergite whitish yellow and brown; pleura greyish brown with narrow yellowish white longitudinal stripe just above coxae. Coxae and trochanters greyish yellow to pale greyish brown; fore femur greyish yellow with darker subapical and indistinctly paler apical ring, fore tibia greyish brown; other leg segments missing. Wings suffused with greyish yellow; Rs strongly arcuated. Halteres with stem dull yellowish grey and knob pale greyish yellow. Abdomen largely greyish brown. Wing length, male 2.7 mm, female 2.9 mm.

**Genitalia:** Male hypopygium, Fig. 12.

**Remarks:** A member of the *G. perssoni* group (THEISCHINGER 1994b) of species; most similar to *G. perssoni* ALEX.

**Diagnostic characters (male):** outer gonostylus ending in long, extremely thin spine.

**Material examined:** Holotype ♂: Queensland, 12°44'S/143°16'E, Claudie River, Iron Range National Park, 25 km NW Lockhart River, 10.11.1988, K. Walker, MV-light (MV).  
**Paratype:** 1 ♀, same data as holotype (MV).

**Distribution:** Queensland (CY).

**Name:** Dedication to Dr K. Walker of Melbourne, who collected the species.

**Genus *Molophilus* CURTIS**

Synonymy as in THEISCHINGER (1992b).

**Subgenus *Austromolophilus* THEISCHINGER**

Synonymy as in THEISCHINGER (1992b).

***Molophilus (Austromolophilus) lewisianus* spec. nov. (Fig. 13)**

**Description** (♂): Head largely greyish- to blackish brown; rostrum, palps, pedicel and flagellum of antennae greyish brown, scape pale yellow. Scutum dark yellow, scutellum brownish black, mediotergite largely brownish black; pleura brownish black with part of anepimeron yellow. Coxae and trochanters yellow, other leg segments missing. Wings suffused with greyish brown, between C and R and between CuA and CuP markedly darker. Halteres with stem greyish white and knob yellowish white. Abdomen largely dark greyish brown. Wing length 3.1 mm.

**Genitalia**: Hypopygium, Fig. 13.

**Female** unknown.

**Remarks**: Very similar to *M. uncinatus* THEI. and *M. kulai* THEI.

**Diagnostic characters** (male): thorax with strong contrast of bright and dark colours; outer branch of inner gonostylus strongly bent medially; inner branch of inner gonostylus slightly s-curved and without side branches.

**Material examined**: Holotype ♂: Queensland, 25 km up Mt Lewis Rd, Mary Ck swamp, 1000 m, 16.4.1994, D.J. Bickel, pans (ANIC).

**Distribution**: Queensland (NEQ).

**Name**: *Lewisianus* 3 = Latinized for "from Mt Lewis".

**Subgenus *Molophilus* CURTIS**

Synonymy as in THEISCHINGER (1992b).

***Molophilus (Molophilus) hypipame* spec. nov. (Fig. 14)**

**Description**: Head largely brownish- to greyish black; rostrum, palps and antennae pale to dark greyish brown. Thoracic terga and pleura dark greyish brown. Coxae and trochanters yellowish- to pale greyish brown, other leg segments missing. Wings suffused with greyish yellow. Halteres with stem dark and knob pale greyish- to whitish yellow. Abdomen largely greyish brown, terminal segments markedly darker. Cerci of female and hypogynial valves brownish yellow. Wing length, male 3.1-3.3 mm, female 2.9-3.4 mm.

**Genitalia:** Male hypopygium, Fig. 14.

**Remarks:** A member of the *M. plagiatus* group sensu TEISCHINGER (1988a); similar to *M. longioricornis* ALEX. and *M. kutha* THEI.

**Diagnostic characters (male):** apical portion of inner gonostylus conspicuously armed with large spines and covered with spinules.

**Material examined:** Holotype ♂: Queensland, Hypipame National Park (The Crater), 910 m, rainforest, 13.-27.4.1994, D.J. Bickel, pans (ANIC). Paratypes: 1♂, 2♀♀, same data as holotype (GT).

**Distribution:** Queensland (NEQ).

**Name:** From Hypipame National Park; treated as a noun in apposition.

### ***Molophilus (Molophilus) sinclairi* spec. nov. (Fig. 15)**

**Description (♂):** Head dark brownish grey; palps darker, antennae paler greyish brown. Thoracic terga and pleura dull yellow to pale greyish brown. Legs pale to dark greyish brown, with tips of femora and tibiae hardly, if at all, darkened. Wings suffused with greyish yellow. Halteres greyish yellow, stem slightly darker than knob. Abdomen largely dark greyish brown, terminal segments greyish- to brownish yellow. Wing length 2.9-3.4 mm.

**Genitalia:** Hypopygium, Fig. 15.

**Female** unknown.

**Remarks:** A member of the *M. plagiatus* group sensu THEISCHINGER (1988a); similar to *M. kokora* THEI.

**Diagnostic characters (male):** inner gonostylus with several sharp apical spines and one or two subapical barbs.

**Material examined:** Holotype ♂: New South Wales, Acacia Plateau Flora Reserve, 1000 m, rainforest, 25.1.1995, B.J. Sinclair, yellow pans (ANIC). Paratypes: 2♂♂, same data as holotype (GT).

**Distribution:** New South Wales (NEN).

**Name:** Dedication to Dr B.J. Sinclair of Ottawa, Canada, who collected the species.

### **Subgenus *Superbomolophilus* THEISCHINGER**

*Superbomolophilus* THEISCHINGER, Stapfia 27: 79 (1992).

***Molophilus (Superbomolophilus) undia spec. nov. (Fig. 16)***

**Description:** Head and palps brownish grey; antennae pale greyish brown. Thoracic terga largely dark greyish brown, greyish yellow along lateral margins of scutum; pleura greyish yellow and greyish brown. Legs greyish yellow to greyish brown with tips of femora, tibiae and basitarsi darkened and terminal four tarsal segments dark greyish brown. Wings suffused with pale greyish brown. Halteres pale greyish brown, stem darker than knob. Abdomen largely dark greyish brown with terminal segments greyish- to brownish yellow. Cerci of female dark brown, extremely short and pointed. Wing length, male 4.1 mm, female 4.7 mm.

**Genitalia:** Male hypopygium, Fig. 16.

**Remarks:** Very similar to *M. kunara* THEI.

**Diagnostic characters (male):** inner gonostylus complex and with small subtriangular tooth; outer gonostylus minute; parameres denticulate and only very slightly bent.

**Material examined:** Holotype ♂: Northern Territory, 24°03'S/132°43'E, Finke Gorge National Park, Palm Valley, 14.3.1995, P. Cranston, light trap (ANIC). Paratype: 1 ♀, same data as holotype (ANIC).

**Distribution:** Northern Territory (IA).

**Name:** Undia is an Australian Aboriginal word for "gorge"; the species was collected in Finke Gorge.

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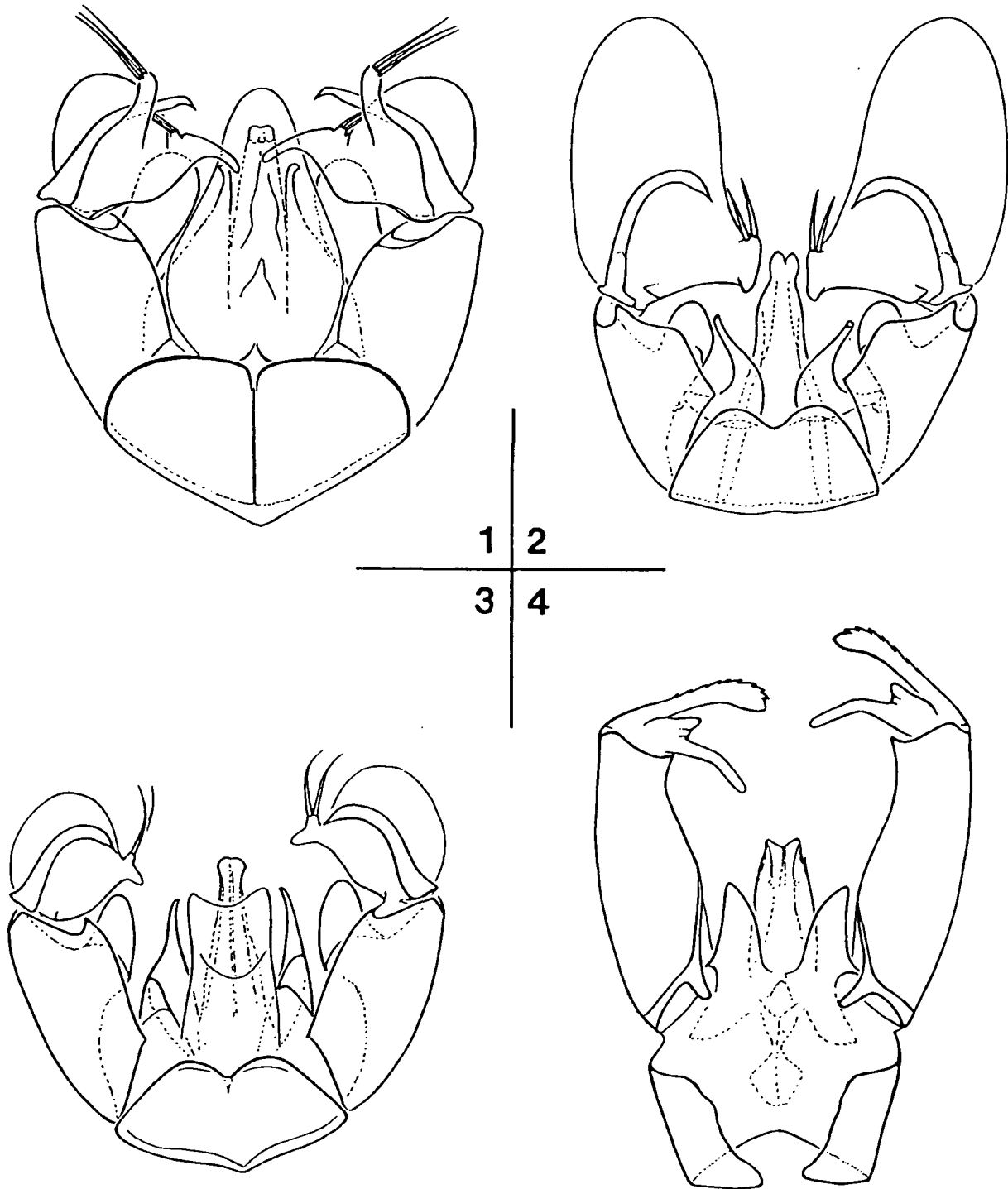
## Species Index

This alphabetical list includes all species treated in the present paper. Reference to the next higher taxon (subgenus) as used in the paper is given by the following abbreviations:

- AA    *Amphineurus* (*Amphineurus*), **5**
- AI    *Atarba* (*Ischnothrix*), **4**
- GL    *Gonomyia* (*Leiponeura*), **8**
- LDa   *Limonia* (*Dapanoptera*), **2**
- LDi   *Limonia* (*Dicranomyia*), **3**
- MA    *Molophilus* (*Austromolophilus*), **10**
- MM    *Molophilus* (*Molophilus*), **10**
- MS    *Molophilus* (*Superbomolophilus*), **11**
- TE    *Toxorhina* (*Eutoxorhina*), **2**

Reference is also given to the figure number in this paper and to the page number of the text (**bold**).

- bickeli* sp. n., AA, 6, **5**
- bickeli* sp. n., AI, 4, 5, **4**
- bickeli* sp. n., LDi, 2, **3**
- cermaki* sp. n., LDa, 1, **2**
- hypipame* sp. n., MM, 14, **10**
- leaski* sp. n., AA, 9, 11a, **7**
- lewisianus* sp. n., MA, 13, **10**
- panthera* THEI., LDi, 3, **4**
- sinclairi* sp. n., MM, 15, **11**
- sp., TE, **2**
- spectabilis* sp. n., AA, 10, 11b, **8**
- superbus* sp. n., AA, 7, **6**
- undia* sp. n., MS, 16, **12**
- walkeri* sp. n., GL, 12, **9**
- zborowskii* sp. n., AA, 8, **6**



Figs 1-4: Male hypopygium, dorsal aspect, of: 1-3: *Limonia*: 1: *L. (Dapanoptera) cermaki* sp. n.; - 2, 3: *L. (Dicranomyia)*: 2: *bickeli* sp. n.; - 3: *panthera* THEL.; - 4: *Atarba (Ischnothrix) bickeli* sp. n.

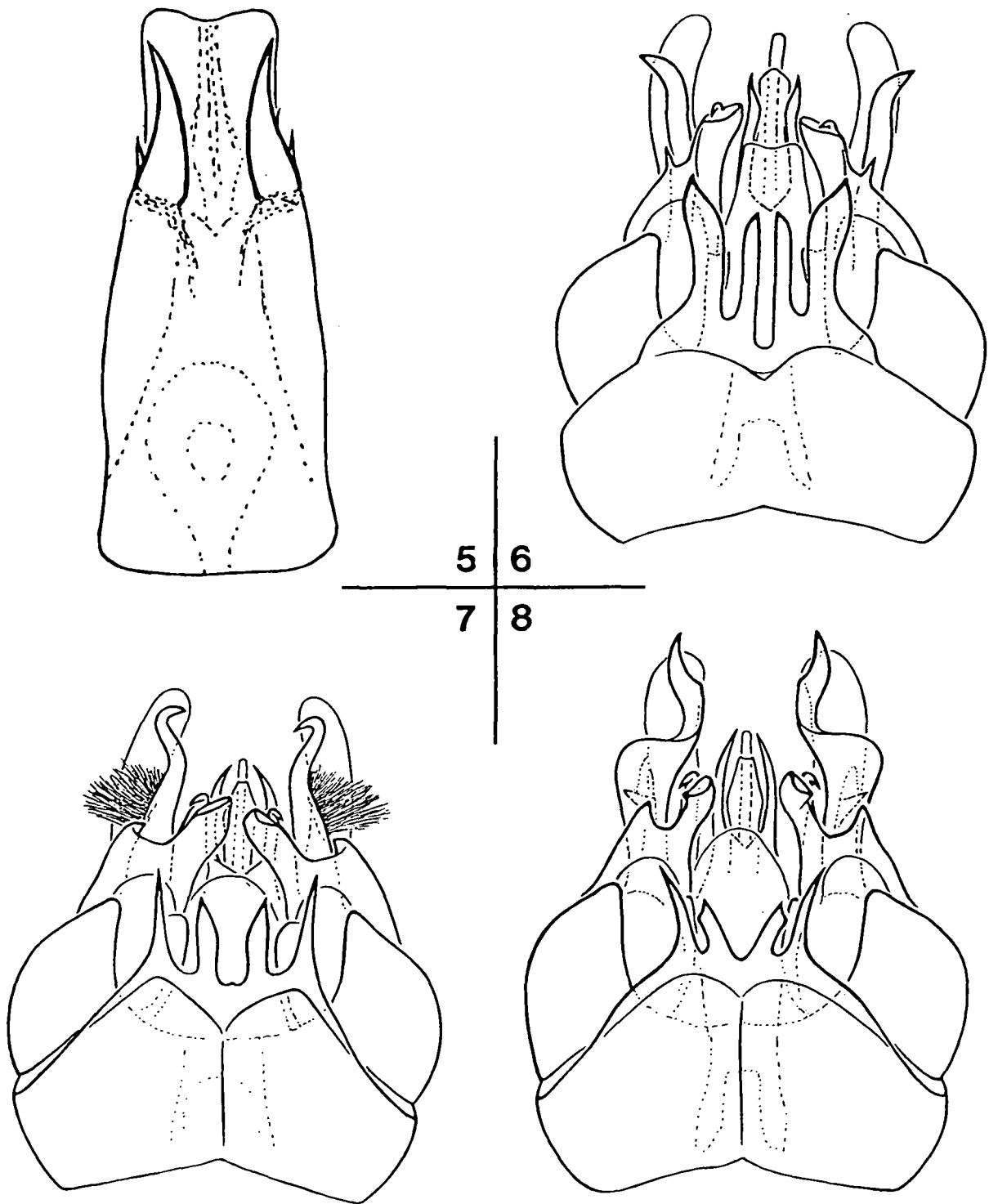
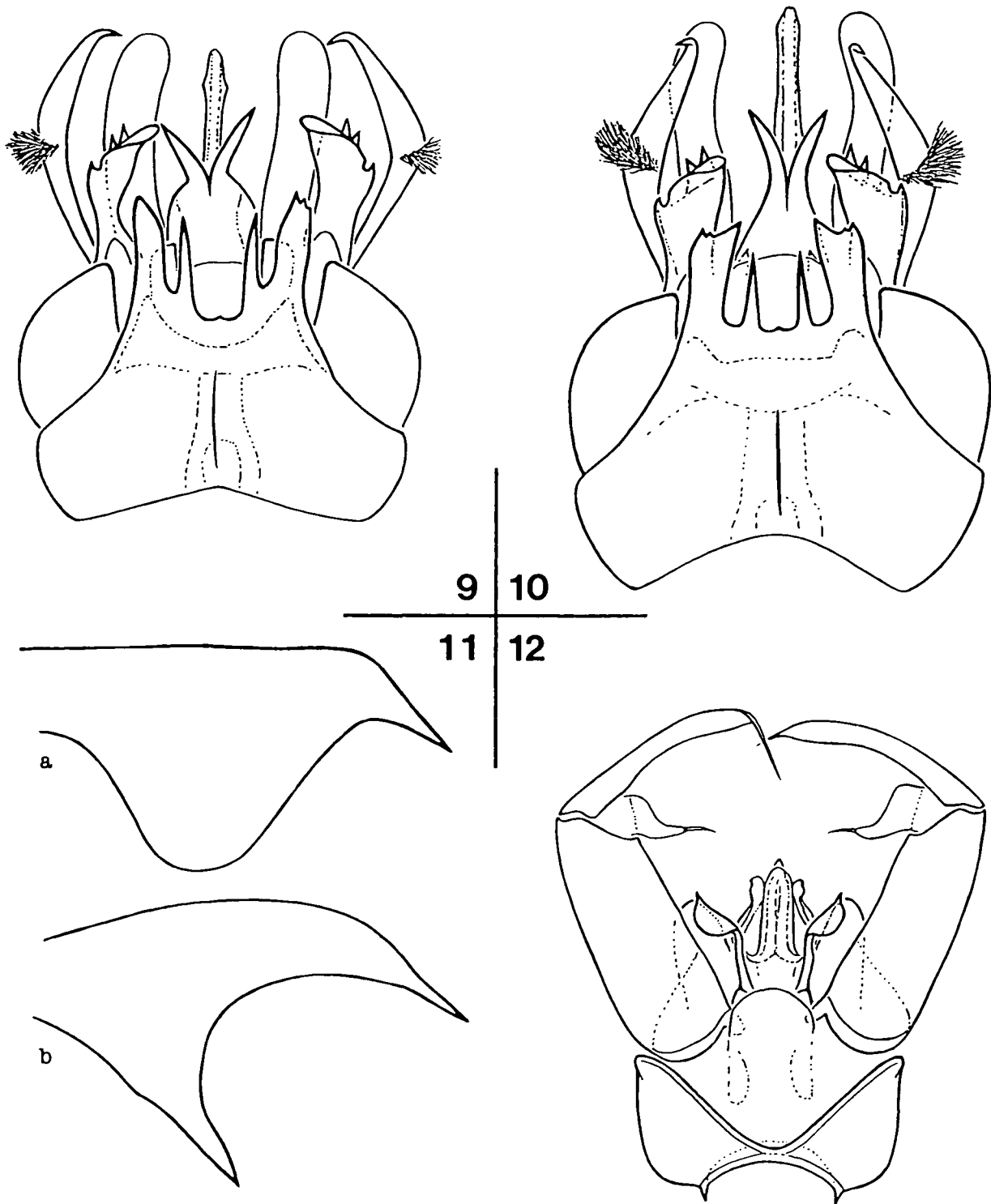
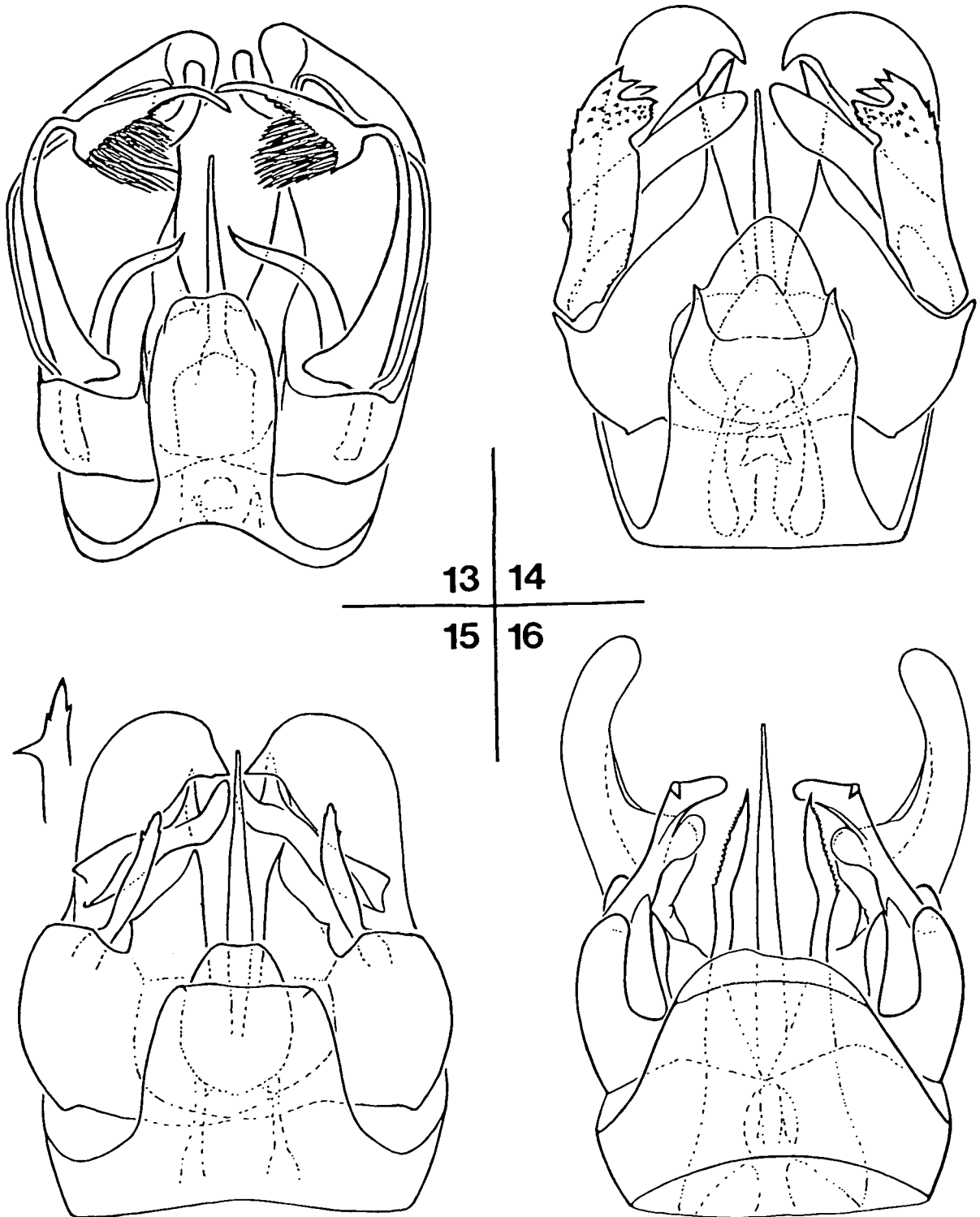


Fig. 5: *Atarba* (*Ischnothrix*) *bickeli*, part of aedeagal complex, ventral aspect. Figs 6-8: Male hypopygium, dorsal aspect, of *Amphineurus* (*Amphineurus*): 6: *bickeli* sp. n.; - 7: *superbus* sp. n.; - 8: *zborowskii* sp. n.



Figs 9-12: Male hypopygium, dorsal aspect, and part of aedeagal complex, lateral aspect, of: 9-11: *Amphineurus* (*Amphineurus*): 9, 11a: *leaski* sp. n.; - 10, 11b: *spectabilis* sp. n.; - 12: *Gonomyia* (*Leiponeura*) *walkeri* sp. n.



Figs 13-16: Male hypopygium, dorsal aspect, of *Molophilus*: 13: *M. (Austromolophilus) lewisianus* sp. n.; - 14, 15: *M. (Molophilus)*: 14: *hypipame* sp. n.; - 15: *sinclairi* sp. n.; - 16: *M. (Superbomolophilus) undia* sp. n.